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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,798	01/09/2002	Thomas B. Berg	BEA919990003US1	2834

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IBM CORPORATION
IP LAW DEPT, ED02-905
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EXAMINER

NGUYEN, TANH Q

ART UNIT PAPER NUMBER

2182

DATE MAILED: 02/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	-10/045,798	BERG ET AL.	
	Examiner	Art Unit	
	Tanh Q. Nguyen	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 15-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 10-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2182

DETAILED ACTION***Election/Restrictions***

1. Applicant's election with traverse of Group I, claims 1-14, in Paper No. 5, is acknowledged. The traversal is on the ground(s) that the claims are but different definitions of the same disclosed subject matter, varying in breadth or scope of definition. This is not found persuasive because the claims do not define the same essential characteristics of a single disclosed embodiment of an invention. MPEP § 806.03.

Applicant argued - As the Examiner has stated in the above groupings, all of the claims are drawn to the same invented subject matter, processing data writes and data transactions from peripheral devices or other computer peripheral components simultaneously without distortion of the data transaction timing sequence. For example, the Examiner states in Group I that claims 1-14 are drawn to "outputting a second write data only after completion of a first write data", and in Group III, that claim 16 is drawn to a data transaction being outputted in the same sequence as issued by a peripheral computer device". Group I and Group III claims, therefore, define the same invention, or groups of claims that are sufficiently related as to be encompassed by a single search by the Examiner.

First, applicant's argument is misleading because the examiner has not stated that the claims are drawn to the same invented subject matter, instead the examiner has indicated that the claims are drawn to different invented subject matters (paragraph 1-paragraph 7 of the prior office action mailed 11/04/2003).

Art Unit: 2182

Second, "processing data writes and data transactions from peripheral devices or other computer peripheral components simultaneously without distortion of the data transaction timing sequence" represents only common characteristics for the respective groups of claims, not essential characteristics for each of the groups of claims. For the claims of Group I, **outputting data** represents the essential characteristic of the group; for the claims of Group II, **preventing issuance of a data write** (i.e. not data) represents the essential characteristic of the group; and for the claims of Group IV, **activating each memory transaction request** (i.e. not data, not data write) when all previously issued write transactions have been completed represents the essential characteristic of the group.

Third, claims 1-14 of Group I are drawn to "outputting a second write data only after completion of a first data write" (not first write data - as argued).

Fourth, with respect to the claims in Group I and Group III defining the same invention (as an example given by applicant as support for Group I-IV defining the same invention), it is noted that the claims of Group I are directed to **outputting write data** (i.e. data) and the claim of Group III is drawn to **outputting a data transaction** (i.e. not data, but transaction). The two groups clearly do not define the same essential characteristics, and are therefore not sufficiently related as to be encompassed by a single search by the Examiner.

Further, because the groups are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification; because the search required for Group I is not required for Groups II, III, IV; the search for Group

Art Unit: 2182

IV is not required for Groups II, III; and the search for Group II is not required for Group III; and because the groups have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper (see paragraph 1-paragraph 7 of the prior office action mailed 11/04/2003).

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 15-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 5.

Claim Objections

3. Claim 3 is objected to because of the following informalities: "data" is misspelled as "date" on line 1. Appropriate correction is required.

4. Claim 4 is objected to because of the following informalities: claim 4 recites "outputting the third write data only after receiving all invalidate signals from the first, second and third data writes" on lines 3-4. Claim 10 should be amended to recite "outputting the third write data only after receiving all acknowledges of invalidate signals from the first, second and third data writes" to be consistent with claim 2, and to conform with the disclosure. Appropriate correction is required.

5. Claim 10 is objected to because of the following informalities: claim 10 recites in line 2, "first and second interconnected groups of one or more processors each" which

Art Unit: 2182

is not clear. The examiner recommends replacing with "first and second interconnected groups, each having one or more processors". Appropriate correction is required.

6. Claims 10-14 are objected to because of the following informalities: claim 10 recites in lines 6-7, "a completion indicator of the first data write, said indicator being responsive to the write data", in which "the write data" can be interpreted as either or both of the first write data and second write data. Claim 10 should be amended to recite "a completion indicator of the first data write, said indicator being responsive to the first write data" to clarify the claim - as the completion indicator of the first data write is responsive only to the first write data. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

8. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "each processor group" in lines 2 and 3.

Claim 1 recites the limitation "the first and second data writes" in line 7.

Claim 1 recites the limitation "said second write data" in line 8.

Claim 1 recites the limitation "said first write data" in line 9.

Claim 5 recites the limitation "the memory system" in line 1.

Art Unit: 2182

There is insufficient antecedent basis for each of the limitations in the respective claims.

Allowable Subject Matter

9. Claims 1-14 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph and of the objections set forth in this Office action.

10. It is, however, noted that if the scopes of claims 4 and 10-14 are different than what the examiner has indicated in the claim objections section above, there would be a great deal of confusion and uncertainty as to the proper interpretation of the limitations of claims 4 and 10-14, and it would not be proper to reject such claims on the basis of prior art. As stated in *In re Steele*, 305 F.2d 859, 134 USPQ 292 (CCPA 1962), a rejection under 35 U.S.C. 103 should not be based on considerable speculation about the meaning of terms employed in a claim or assumptions that must be made as to the scope of the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Quang Nguyen whose telephone number is (703) 305-0138, and whose e-mail address is tanh.nguyen36@uspto.gov. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

Art Unit: 2182

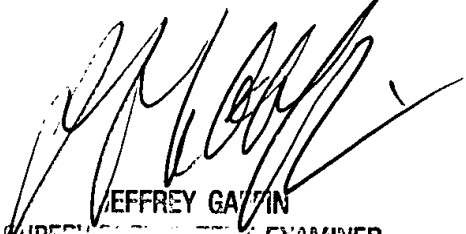
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin, can be reached on (703) 308-3301. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306 for After Final, Official, and Customer Services, or (703) 746-5672 for Draft to the Examiner (please label "PROPOSED" or "DRAFT").

Effective May 1, 2003 are new mailing address is:

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JEFFREY GAFFIN
SUPERVISOR EXAMINER
TECHNOLOGY CENTER 2100

TQN
February 17, 2004